

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Previously Presented) An ultrasonic imaging apparatus comprising:
an ultrasonic probe that receives and sends ultrasonic waves from/to an object;
an ultrasound image structuring unit configured to generate an ultrasound image on the basis of a reflected echo signal received by the ultrasonic probe;
an elastic image structuring unit configured to obtain a strain or an elastic modulus of the elasticity of the object of a region corresponding to the ultrasound image on the basis of the reflected echo signal and generates a color elastic image;
a display configured to overlay the ultrasound image to the color elastic image, or arrange the ultrasound image and the color elastic image and displays the resultant image on a screen; and
a setting unit configured to variably set a corresponding relationship between a hue of the color elastic image displayed on the screen and the level of the strain or elastic modulus, wherein
the color elastic image is displayed with the hue for a larger region or a smaller region in the strain or the elastic modulus than a preset amount of the strain or the elastic modulus.

2. (Previously Presented) An ultrasonic imaging apparatus according to Claim 1, wherein the corresponding relationship between the hue of the color elastic image and the level of the strain or elastic modulus set by the setting unit is displayed on the screen with a color bar.

3. (Previously Presented) An ultrasonic imaging apparatus according to Claim 2, wherein, with the color bar, a large amount of the strain or the elastic modulus and a small amount of the strain or the elastic modulus are displayed with different hues and the boundary between the hue having the large amount of the strain or the elastic modulus and the hue having the small amount of the strain or the elastic modulus is displayed with another hue.

4. (Previously Presented) An ultrasonic imaging apparatus according to Claim 3, wherein the boundary between the hue having the large amount of the strain or the elastic modulus and the hue having the small amount of the strain or the elastic modulus is movably formed with the setting unit.

5. (Previously Presented) An ultrasonic imaging apparatus according to Claim 2, wherein a boundary region of the hue different from the hue of the periphery is settably formed at an arbitrary position of the color bar with the setting unit.

6. (Cancelled).

7. (Previously Presented) An ultrasonic imaging apparatus according to Claim 1, wherein the color elastic image has a peripheral region including a setting

value of the amount of the strain or the elastic modulus with the hue different from the hue of another region.

8. (Previously Presented) An ultrasonic imaging apparatus according to Claim 7, wherein the hue of the peripheral region has a tone in accordance with the level of the amount of the strain or the elastic modulus.

9. (Previously Presented) An ultrasonic imaging apparatus according to Claim 1, wherein the elastic image structuring unit comprises:

a color conversion table that is rewritable and sets a relationship between the level of the amount of the strain or the elastic modulus and the color of the color elastic image;

a calculator configured to calculate an amount of the strain or the elastic modulus of the elasticity of the object of a region corresponding to the ultrasound image on the basis of the reflected echo signal and; and

a color image generator configured to read the color corresponding to the obtained amount of the strain or the elastic modulus from the conversion table and generate a color elastic image indicating the distribution of physical quantities, and

wherein the color conversion table is rewritten in accordance with an instruction input from the setting unit.

10. (Previously Presented) An ultrasonic imaging apparatus according to Claim 9, wherein the elastic image structuring unit displays, on the screen of the display unit, a color bar indicating a corresponding relationship between the level of

the amount of the strain or the elastic modulus and the hue of the color elastic image, set to the color conversion table.

11. (Cancelled).

12. (Cancelled).

13. (Previously Presented) An ultrasonic imaging apparatus according to Claim 1, wherein the color elastic image is displayed for at least one of a hard region with a high elastic modulus and a soft region with a low elastic modulus.

14. (Previously Presented) An ultrasonic imaging apparatus comprising:
an ultrasonic probe that receives and sends ultrasonic waves from/to an object;

an ultrasound image structuring unit configured to generate an ultrasound image on the basis of a reflected echo signal received by the ultrasonic probe;

an elastic image structuring unit configured to obtain a strain or an elastic modulus of the object of a region corresponding to the ultrasound image on the basis of the reflected echo signal and generate a color elastic image;

a display configured to overlay the ultrasound image to the color elastic image, or arranges the ultrasound image to the color elastic image and display the resultant image on a screen; and

a setting unit configured to variably set a corresponding relationship between a hue of the color elastic image displayed on the screen and a level of the strain or the elastic modulus, wherein

the setting unit assigns the hue of the color elastic image so as to prevent the display from displaying a neutral portion in a color conversion table.